

ABSTRACT

A reduced diameter intraluminal grafting system capable of deploying a bifurcated graft into a bifurcated vessel is described. The bifurcated graft is comprised of a main tubular member and two tubular legs with attachment systems configured into each of the three ends of the graft. The bifurcated graft along with the mechanisms required to position and attach the bifurcated graft fit within a single delivery catheter for intraluminal delivery. The bifurcated graft, positioning mechanisms and attaching mechanisms are configured such that a small diameter delivery catheter can be utilized. The methods of positioning and attaching the bifurcated graft are also described.